

REMARKS

Claims 1-5 and 13-15 are pending in the application.

Claim Rejections under 35 USC §112

Claim 13 has been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

The claim language allegedly lacking antecedent basis has been removed, thus rendering this rejection moot.

Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections under 35 USC §102

Claims 4 and 5 are rejected under 35 U.S.C. §102(b) as being anticipated by Beddingfield.

Independent claim 4 has been amended to recite a redistribution layer having a plurality of conductive patterns which connects the electrodes of the semiconductor device to a plurality of electrode pads each with a first shape and a first size located in predetermined positions of the redistribution layer.

In section 6 of the outstanding Office action, the Office has specifically assessed that Beddingfield fails to disclose a redistribution layer having a plurality of conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads. It has also turned out that what the Office regards as conductive patterns 15 in Ho are actually thermal vias, the

amended claim language patentably distinguishes independent claim 1 from the asserted prior art of record. All claims dependent thereon, by virtue of inherency, are also patentably distinguished over the asserted prior art.

It is well settled that:

"A claim is anticipated only if each and every element *as set forth in the claim* is found, either expressly or inherently described, in a single prior art reference." *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1567, 7 USPQ2d 1057 (Fed. Cir. 1988)."

Should the Office continue to believe that independent claim 4, as amended, is anticipated by the asserted prior art, a citation of where each and every claimed feature, either as column number and line number, or figure number and reference numeral, or a combination thereof, as disclosed in the asserted prior art is respectfully requested. Should the Office determine that any claimed feature is not disclosed in the asserted prior art, it is respectfully submitted that the claimed invention is not anticipated by the asserted prior art. Allowance of the claimed invention is then respectfully requested.

Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 13 is rejected under 35 U.S.C. 102(e) as being anticipated by Ishikawa et al.

Independent claim 13 has been amended to recite that each concentric grooves being connected to more than one hole.

This aspect of the claimed amendment is supported by way of an example in Figures 32A and 32B, wherein there is indeed disclosed an apparatus for fixing a semiconductor wafer by suction, comprising a vacuum chuck table 90 having a porous plate 94 overlaying a plurality of concentric suction grooves 92a; a plurality of suction passages each being correspondingly connected to the plurality of concentric suction grooves 92a; and each of the plurality of suction passages being connected to more than one hole 94a on the porous plate 94; suctioning device for sequentially introducing a suctioning force into the suction passages at different timing.

By so amending, independent claim 13 is believed to be placed in condition for allowance.

Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections under 35 USC §103

Claims 1-3, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beddingfield in view of Ho.

The outstanding Office action has stated that Beddingfield does not disclose a redistribution layer having a plurality of electrode pads and conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads. The Applicant agrees with this Office assessed shortcoming of Beddingfield.

To supplement this Office assessed shortcoming, the Office has stated that Ho discloses in Figure 2 a redistribution layer 12 having a plurality of electrode pads 31 and conductive patterns 15 connecting the electrodes of the semiconductor element 11 to the respective electrode pads.

Therefore, it is a firm Office position that in Ho, reference numeral 11 discloses a semiconductor element, reference numeral 12 discloses a redistribution layer and reference numeral 15 discloses conductive patterns. The objective disclosure of Ho disagrees with the firm Office position. According to Ho, reference numeral 11 discloses a semiconductor die, reference numeral 12 discloses a substrate and reference numeral 15 discloses thermal vias. According to column 4 lines 33-34 of Ho, thermal vias are actually conduits for transferring heats. There is simply no disclosure that the conduits are conductive patterns. MPEP 2143.01 has specifically stated that:

“[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).”

Here, should thermal vias 15 of Ho be replaced by conductive patterns, Ho would not be able to effectively allow fluid communication as thermal vias would. Therefore, the claimed invention is not rendered obvious by the asserted prior art references.

Even though it is readily understood by a person of ordinary skill in the semiconductor art that conductive patterns refer to electrical conductivity, especially when the claim language has provided a context of “conductive patterns connecting the electrodes of the semiconductor element to the respective electrode pads.” To make this feature even more explicit, conductive patterns have been amended to be electrical conductive patterns. By so amending, independent claims 1, 14 and 15 are even more patentably distinguished over the asserted prior art. All claims dependent thereon, by virtue of inherency, are also even more patentably distinguished over the asserted prior art.

Reconsideration and withdrawal of this rejection are respectfully requested.

U.S. Patent Application Serial No. 09/577,932
Attorney Docket No. 000663

Conclusion

In view of the aforementioned amendments and accompanying remarks, the claims, as amended herein, are believed to be patentable and in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,
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